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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,872	12/26/2001	Dennis Boyd	26422/20650	7442

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HUSCH & EPPENBERGER, LLC
190 CARONDELET PLAZA
SUITE 600
ST. LOUIS, MO 63105-3441

EXAMINER	
HO, THOMAS Y	

ART UNIT	PAPER NUMBER

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/032,872	BOYD, DENNIS	
	Examiner	Art Unit	
	Thomas Y Ho	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-16 and 18-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-16, 18-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

Claims 1, 3-16, and 18-20 are pending. Claims 2 and 17 have been withdrawn or cancelled.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/15/04 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-9, 15-16, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pekar US5638565 in view of Boyd US5740573.

As to claim 1, Pekar discloses, an air mattress (see Figure 12) comprising: a first inflatable compartment 14',14" having a first layer (the bottom layer of 14"), a second layer (the top layer of 14'), and a periphery defining a length and a width; a second inflatable compartment 14 having at least one additional layer (the top layer of 14 in Figure 12) and extending generally said length and width of said periphery, said second inflatable compartment being tufted, said

second inflatable compartment 14 having a vertical extent substantially less than the height of the first inflatable compartment 14'/14"; and a perimeter seal 48 connecting said first inflatable compartment to said second inflatable compartment, wherein said perimeter seal is recessed from said periphery; wherein said second layer (the top layer of 14') forms a boundary surface between said first inflatable compartment 14',14" and said second inflatable compartment 14 and contains a plurality of fluid communication channels 22 between said first compartment and said second compartment, said fluid communication channels providing fluid communication between the first and second inflatable compartments to enable fluid in one of the first and second inflatable compartments to flow into the other of the first and second inflatable compartments.

The difference between the claim and Pekar is the claim recites: a strip extending from the first layer to the second layer such that the strip defines substantially straight, vertically extending sides defining a height of the first inflatable compartment. Boyd discloses an inflatable cushion similar to that of Pekar. In addition, Boyd further teaches a strip 25 extending from a first layer to a second layer such that the strip defines straight, vertically extending sides defining a height of the first inflatable compartment 11. It would have been obvious to one of ordinary skill in the art, having the disclosures of Pekar and Boyd before him at the time the invention was made, to modify the inflatable cushion of Pekar to have a strip, as in Boyd. One would have been motivated to make such a combination because the ability to secure the inflatable chambers to each other would have been achieved, as taught by Boyd (Col. 2, Ln. 30-36).

As to claim 3, Pekar discloses, wherein said second inflatable compartment 14 further comprises a second additional layer (the bottom layer of 14 in Figure 12) between said one additional layer (the top layer of 14) and said first inflatable compartment 14',14", said second additional layer being sealed to said second layer (the top layer of 14') of said first inflatable compartment adjacent to said plurality of fluid communication channels 22.

As to claim 4, Pekar discloses, wherein said second inflatable compartment 14 further comprises a plurality of discontinuous seals 46. The seals 46 are discontinuous at and around the channels 20.

As to claim 5, Pekar discloses, wherein said second inflatable compartment 14 further comprises a plurality of attachments 44 (see Figure 12).

As to claim 6, Pekar discloses, further comprising a layer of cushioning material 44 within said second inflatable compartment 14 (see Figure 12).

As to claim 7, Pekar discloses, wherein said layer of cushioning material 44 is selected from the group consisting of foams, gels, and liquids (col.6, ln.1-5).

As to claim 8, Figure 12 of Pekar fails to disclose or suggest, further comprising a valve between said first inflatable compartment 14',14" and said second inflatable compartment 14. However, Pekar does disclose that the embodiment of Figure 12 does have some kind of valve for inflation/deflation (col.7, ln.10-20). Regardless, Figure 9 of Pekar discloses a valve 24' between a first and second chamber. It would have been obvious to one of ordinary skill in the art, having the disclosure of Pekar before him at the time the invention was made, to modify the compartments (the first compartment 14',14" and the second compartment 14) of Figure 12 in Pekar to have the valve between them, as in Figure 9 of Pekar, to obtain a valve between

compartments. One would have been motivated to make such a combination because the ability to have an intermediate chamber that can be filled or inflated to prevent bottoming out, would have been achieved, as taught by Pekar (col.6, ln.55-65).

As to claim 9, Pekar discloses, further comprising a valve 24 in said first inflatable compartment 14',14". As evidenced by Pekar in Figure 3, the compartments of Pekar are structurally identical, and either can be the first or second compartment.

As to claim 15, Pekar discloses, an air mattress (see Figure 12) comprising: a first inflatable compartment 14',14" having a first layer (the bottom layer of 14"), a second layer (the top layer of 14' in Figure 12), and a periphery defining a length and a width; a second inflatable compartment 14,82 (see Figure 3) having at least one additional layer (top layer of 14) and extending generally said length and width of said periphery, said second inflatable compartment being tufted, said second inflatable compartment having a vertical extent substantially less than the height of the first inflatable compartment; and a layer of cushioning material (gel; col.6, ln.55-65) in one of said first inflatable compartment and said second inflatable compartment (the gel is only in cavity 82 of the second inflatable compartment 14,82), wherein the other of said first inflatable compartment and said second inflatable compartment is inflated but does not contain a layer of cushioning material; wherein said second layer (top layer of 14') forms a boundary surface between said first inflatable compartment and said second inflatable compartment and contains a plurality of fluid communication channels 22,22,22 (three of the channels 22 are the plurality of fluid communication channels; the fourth channel 22 is a valve because it can effect the rate of flow of fluid) between said first compartment and said second compartment, said fluid communication channels providing fluid communication between the

first and second inflatable compartments to enable fluid in one of the first and second inflatable compartments flow into the other of the first and second inflatable compartments.

Boyd teaches: a strip 25extending from the first layer to the second layer such that the strip defines sides, the length of the strip defining a height of the first inflatable layer.

As to claim 16, Pekar discloses, wherein said layer of cushioning material (gel; col.6, ln.1-5) is selected from the group consisting of foams, gels, and liquids.

As to claim 18, Pekar discloses, wherein said second inflatable compartment 11 further comprises a second additional layer (bottom layer of 14 in Figure 12) between said one additional layer (top layer of 14 in Figure 12) and said first inflatable compartment 14',14", said second additional layer being sealed to said second layer of said first inflatable compartment adjacent to said plurality of fluid communication channels 22,22,22.

As to claim 19, Pekar discloses, further comprising a perimeter seal 48 connecting said first inflatable compartment 14',14" to said second inflatable compartment 14, wherein said perimeter seal is recessed from said periphery.

Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pekar US5638565 in view of Boyd US5740573, and further in view of Chung US6332760.

As to claim 10, Pekar discloses the inflatable cushion. Furthermore, it is inherent that there is some form of a pump to inflate the cushion of Pekar through the valve 24. The difference between the claim and Pekar is the claim recites, further comprising a pump connected with said valve. Chung discloses an inflatable cushion similar to that of Pekar. In addition, Chung further teaches to use a pump to connect with a valve to inflate a cushion. It would have been obvious to one of ordinary skill in the art, having the disclosures of Pekar and

Chung before him at the time the invention was made, to modify the inflatable cushion of Pekar to include a pump, as in Chung, to obtain a pump to inflate the cushion. One would have been motivated to make such a combination because the ability to easily inflate and deflate the cushion would have been obtained, as taught by Chung (col.1, ln.1-30).

As to claim 20, Pekar discloses, further comprising a valve 22 (three of the channels 22 are the plurality of fluid communication channels; the fourth channel 22 is a valve because it can effect the rate of flow of fluid) between said first inflatable compartment 13 and said second inflatable compartment 11. Chung teaches a pump in fluid communication with said valve.

Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pekar US5638565 in view of Boyd US5740573, and further in view of Reed US2604641.

As to claim 11, Pekar discloses, an air mattress (see Figure 12) comprising: a first inflatable compartment 14',14" having a first layer (bottom layer of 14"), a second layer (top layer of 14'), and sides (the bottom layer of 14' and the top layer of 14") with a length and a width and defining a periphery; a second inflatable compartment 14 having at least one additional layer (the top layer of 14 in Figure 12) and extending generally the length and width of the periphery, said second inflatable compartment being tufted, said first and second inflatable compartments having substantially different heights; a perimeter seal 48 connecting said first inflatable compartment to said second inflatable compartment, wherein said perimeter seal is spaced a distance from the periphery; and a fluid communication channel 22 between said first inflatable compartment and said second inflatable compartment, said fluid communication channels providing fluid communication between the first and second inflatable compartments to enable fluid in one of the first and second inflatable compartments to flow into the other of the

first and second inflatable compartments. The difference between the claim and Pekar is the claim recites, a plurality of ribs extending from the first layer to the second layer of the first compartment. Reed discloses an inflatable cushion with a plurality of cells similar to that of Pekar. In addition, Reed further teaches a plurality of ribs 25 between first and second layers (see Figure 5) of the first compartment. It would have been obvious to one of ordinary skill in the art, having the disclosures of Pekar and Reed before him at the time the invention was made, to modify the compartments of Pekar to have a plurality of ribs between the layers, as in Reed. One would have been motivated to make such a combination because additional strength would have been achieved, as taught by Reed (col.3, ln.70-75; col.4, ln.1-5).

Boyd teaches: the sides being formed by a substantially straight, vertically extending strip 25 extending from the first layer to the second layer.

As to claim 12, Pekar discloses, wherein said second inflatable compartment 14 further comprises a plurality of discontinuous seals 46. The seals 46 are discontinuous at or near channels 20.

As to claim 13, Pekar discloses, further comprising a layer of cushioning material 44 within said second inflatable compartment 14 (see Figure 12).

As to claim 14, Pekar discloses, wherein said layer of cushioning material 44 is selected from the group consisting of foams, gels, and liquids (col.6, ln.1-5).

Response to Arguments

Applicant's arguments with respect to claims 1, 3-16, and 18-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Y Ho whose telephone number is (703)305-4556. The examiner can normally be reached on M-F 10:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J Swann can be reached on (703)306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TYH

ROBERT J. SANDY
PRIMARY EXAMINER